



INSIGHT
DC EXPERT 4.0

PRODUCTS AND SERVICES

✖ Enterprise

- + Warehouse Master II WMS
- + Transportation Management System
- + Transport Planning System

✖ Desk Top

- + DC Expert
- + Transportation Routing & Scheduling

■ Strategic

- Strategic Logistics Modeling

■ Professional Services

- Consulting
- Health Check
- Implementation

INSIGHT CLIENTS

- ✖ Ace Hardware
- ✖ 3M
- ✖ Coca Cola
- ✖ Acklands Grainger
- ✖ Thyssen Krupp
- ✖ Lion Breweries
- ✖ Lennox
- ✖ Kraft
- ✖ Nissan Canada
- ✖ Eaton Corp.
- ✖ Grace Kennedy
- ✖ Nestle
- ✖ Bridgestone
- ✖ Nike
- ✖ Proctor & Gamble
- ✖ Rohm and Haas
- ✖ Moen
- ✖ Sobeys
- ✖ Fruit of the Loom
- ✖ Cadbury
- ✖ Asics
- ✖ Fosters Group
- ✖ Spectrum Supply Chain Solutions
- ✖ Mainfreight International
- ✖ Unilever
- ✖ Alpha Distribution Solutions
- ✖ Apollo Health and Beauty
- ✖ CEVA Logistics
- ✖ Grocers Supply Company

LOGISTICS COMPANIES

- ✖ DHL
- ✖ Metro Canada Logistics
- ✖ CEVA Logistics
- ✖ Spectrum Supply Chain
- ✖ Odyssey Logistics
- ✖ Protrans
- ✖ Ryder Logistics
- ✖ Exel
- ✖ Mainfreight Intl
- ✖ Huxloe Logistics
- ✖ Delamode
- ✖ Bev Chain – Linfox
- ✖ Progistix – SCL
- ✖ Alpha Distribution

FOOD AND BEVERAGE INDUSTRY

- ✖ Coca Cola
- ✖ Pepsico
- ✖ Fosters Breweries
- ✖ Lion Nathan Breweries
- ✖ Gilmours
- ✖ Moet Hennessey
- ✖ Fast and Fresh - Brazil
- ✖ Nestle DSD
- ✖ Kraft
- ✖ Cadbury Adams
- ✖ Unilever

DC EXPERT 4.0

- ✖ Maximize your warehouse facility
- ✖ Increase the cubic utilization of the facility
- ✖ Decrease overall travel distance and handling in the facility
- ✖ Apply new or existing models in the warehouse against each other for proof of concept and ROI discussions.
- ✖ Increase warehouse flexibility to handle new or seasonal products
- ✖ Quickly react or predict labour requirements
- ✖ Create a standard set of terminology and tool set for the entire supply chain operation
- ✖ Comprehensive warehouse slotting and planning (including zone and work balancing)

WHY DC EXPERT?

- ✘ DC Expert is the only product on the market to integrate all aspects of warehouse planning in one tool set
- ✘ Interface and data requirements for DC Expert are simple yet unique. Using Access or Excel or CSV formats, any existing enterprise system can feed DC Expert data.
- ✘ DC Expert is the only planning product to combine warehouse design, location coordinates and slotting in one tool

WHY DC EXPERT?

- ✘ Slot Master provides unique ability to slot through logical location or physical location
- ✘ Slot Master automatically calculates cube utilization based on SKU analysis by location
- ✘ Pre Profiler in Slot Master automatically calculates bay, shelf, bed or location profiles and totals for the facility.
- ✘ Over 100,000 Algorithms in DC Expert
- ✘ Benchmark tool allows users to calculate activity KPI's and then forecast labor and MHE requirements.



INSIGHT
DATA TEMPLATE

FILE DESCRIPTION

Key	Field	Req'd	RS	SM	Example	Default	Description
1	Item	Y			AB123		The SKU number/code as a unique item identifier
2	Supplier	N			ABC Wines	1	Supplier Name or Identifier
3	Pre_Process	N			0	0	ADVANCED: 1 = Yes; 0 = No: Is there a pre-Process for this product prior to dispatch? (Kitting, QA etc.)
4	Description	Y			Merlot		Standard Product Description at the SKU Level
5	Prod_Fam	Y			Wines		Standard Product grouping field - defined as text - can conform to user generated groupings.
6	Ave_Activity	Y			18		Number of Pallets (or Pallet Equivalents) picked per week
7	BOH	Y			72		BOH Snapshot - or Ideal Inventory holdings by SKU (i.e. 2 weeks inventory plus safety stock)
8	BOH_Percent_In_Pface	N			1	1	ADVANCED: The Percentage of total BOH required in the Physical Pickface
9	Min_In_Pface	N			1	0	ADVANCED: The min.amount in the pick face as assigned by the user in cases/units(def=0)
10	Max_In_Pface	N			20	99999	ADVANCED: the max amount in the pick face as assigned by the user in cases/units (def = 99999)
11	Pickface_Slots	N			3	1	ADVANCED: The number of allocated pick face slots - manually defined by user
12	Pickface_Cubefill_Percent	N			0.55	1	ADVANCED: The Percentage of cube required
13	M_Case_Height	Y			5		Master case height in inches or meters
14	M_Case_Length	Y			10		Master case length(depth) in inches or meters
15	M_Case_Width	Y			8		Master Case With in inches or meters
16	P_Height	Y			6		Height of the pallet in inches or meters
17	P_Width	Y			40		width of the pallet in inches or meters
18	P_Length	Y			48		Length (depth) of the pallet in inches or meters
19	Stack_Height	N			0	1	ADVANCED: If product is floorstacked - define height of the stack on the floor including base pallet.
20	Crushable	Y			0		Scale from 1-99999: Based on Fragility of the picked product (higher fragility = higher Crushable value)
21	Cases_Layer	Y			4		Ti - or Number of cases per layer
22	Layers_Pallet	Y			4		Hi - or Number of layers per pallet
23	Toxicity	Y			7		Scale from 1-99999: Based on hazardous nature of the product or to define product adjacencies
24	M_Case_Weight	Y			200		Mcase case weight in pounds or KG
25	Item_Ranking	N			2	1	User entered rank of each product - for manually defined self-building algorithms
26	Item_Ranking_Expression	N			8	1	Formulated expressions used as criterion on which to sort each family (SQL Based)
27	Case_Pick	Y			1		1=Case or Unit Storage Pick, 0= Full Pallet Pick (use smallest unit in assigning this value)
28	Fam_Ranking	N			1	1	User entered rank of each family group
29	Fam_Ranking_Expression	N			1	1	Formulated expression in SQL used as criterion to sort each item within the defined group
30	UPC_Code	N			652145889		Standard UPC Code per User - not required
31	Toteable	N			0	0	1=Yes, 0 = No - is there a fixed bin or storage container size for this SKU item
32	Decantable				0		1=Yes, 0 = No - Can a pallet of this SKU be broken down to the case or unit level?
33	Casepick				1		1= Case or Unit Storage, 0=Full Pallet Storage
34	Special	N			0	0	1=Yes, 0=No - Special Process - User Defined
35	Preferred_Zone_Id	Y			Zone 1		Advanced zoning ID: by Designated product/family/classification types.
36	Location_ID	Y			D1203A1		User's naming convention or nomenclature

RACK SELECTION

- ✘ Rack Selection provides the Macro slotting functionality by indicating what type of medium a product should be stored in and picked from.
- ✘ Looking at both the physical Fixed costs of a medium and the variable costs around productivity, Rack Selection provides a SKU by SKU analysis of the lowest cost solution.
- ✘ Rack Selection allows users to compare a multitude of storage mediums and real or forecasted data to create models for actionable management decisions.

RACK SELECTION PROCESS

Creates a Matrix

Item	Rack A	Rack B	Rack C
1			
2			
3			
4			
5			

Check for fit in rack type

Item	Rack A	Rack B	Rack C
1	Y	Y	Y
2	Y	Y	Y
3	Y	Y	N
4	Y	N	N
5	Y	N	N

Removes racking based on minimums

Item	Rack A	Rack B	Rack C
1	Y	Y	Y
2	Y	Y	Y
3	Y	Y	N
4	Y	N	N
5	Y	N	N
Min SKUs	YES	YES	NO

Item	Rack Type	Rank	Variable (\$)
1	A	1	1,500
1	B	2	1,621
1	C	Fail	711

2	B	1	1,782
2	A	2	1,972
2	C	Fail	1,172

3	B	1	3,287
3	A	2	3,982

4	A	1	1,224
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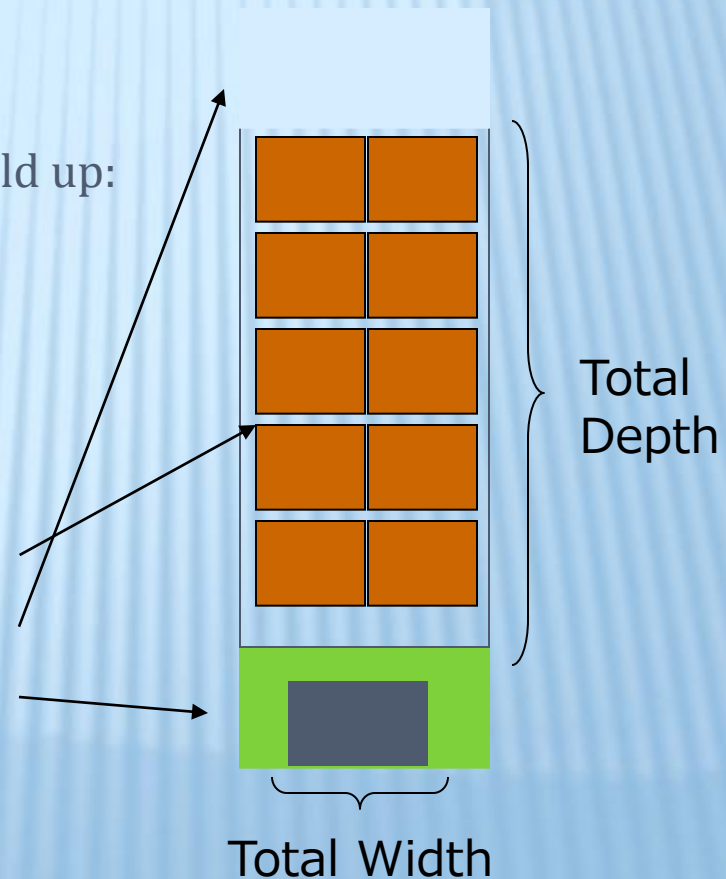
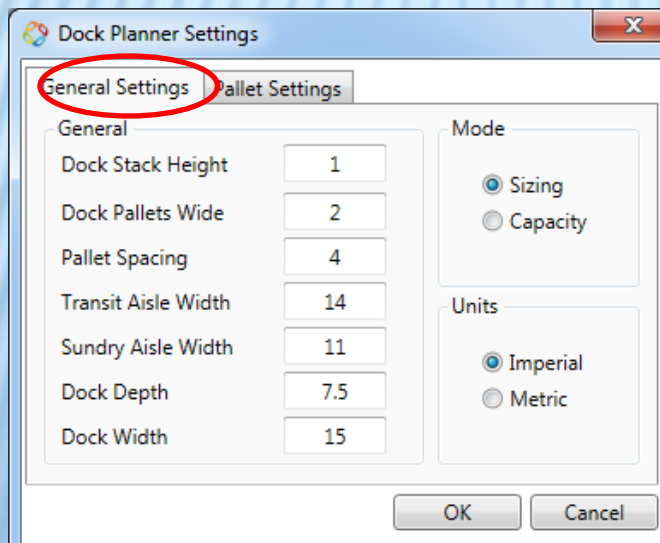
5	A	1	1,311
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Calculates fixed and variable costs then ranks each rack type for each item

DOCK PLANNER

Within the Dock planner module from the menu

- ✗ Select Mode | Settings
- ✗ Select General Settings Change Button
- ✗ The parameters are used to build up:
 - ✗ Dock area
 - ✗ Sundry pallet area



DOCK PLANNER SIMULATION

▼ Dock Planner Slot Master Warehouse Layout

📄 Calculate ↶ Back 🎬 Animation 💾 Export 🏠 General 📦 Pallet ⚙️ Mode 📏 Units

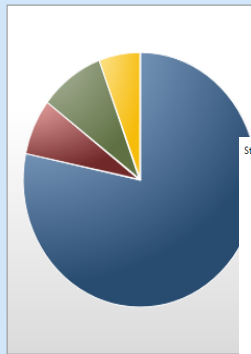
Functions Settings

New Model 1 ✕

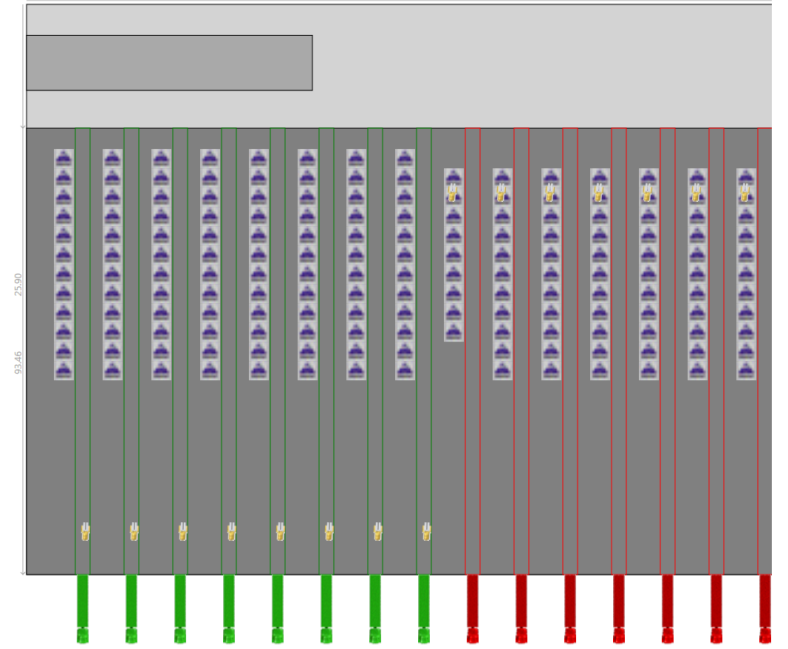
Pallets		Areas Required	
Temporary Buffer/Frozen	24	Marshalling/Staging	16734 Sq.Ft
Returns and Damages	12	SundryArea	1520 Sq.Ft
Empty Pallet Stacks	12	Doors/Docks	1912 Sq.Ft
Dispatch - Priority Pallets	0	Non-Activity Area	1209 Sq.Ft
Peak Factor	0		
Activity Related	525		
Total	573	Total	21375 Sq.Ft

Loading/Unloading Activities			Marshalling/Staging	
	Receiving	Shipping	Receiving	Shipping
Number of Loads	42	48	Pallets Marshalled/Staged	250 275
Number of Doors	8	9	Maximum Pallets Per Operation	275
Maximum Doors per Operation	9			
Total Doors	17		Total Pallets Marshalled/Staged	525

Area Summary

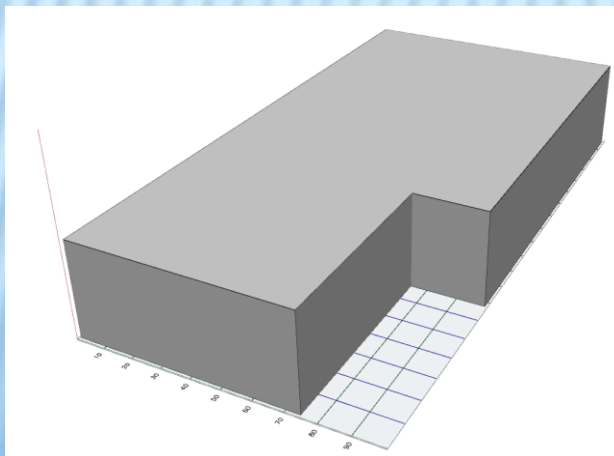
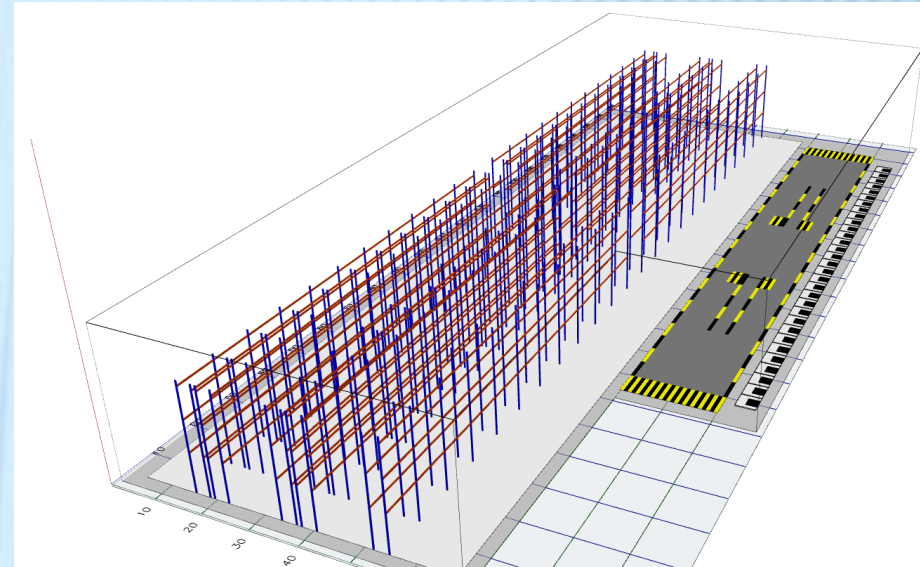
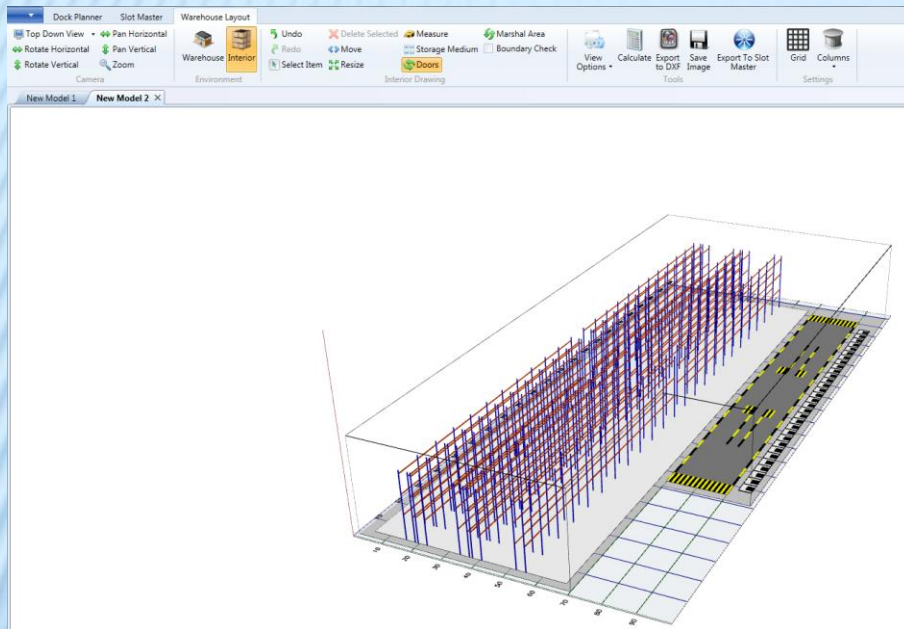


Starting Time: 08:00:00 Current Time: 12:18:50 Finishing Time: 16:00:00
179.05



Pallets Received: 96	Pallets Shipped: 0	Pallets Marshalled In: 0	Pallets Marshalled Out: 97	# Doors Active: 17
Loads Finished: 0	Loads Finished: 0	Loads Finished: 0	Loads Finished: 0	Percentage: 100.00%

3D DRAWING ENGINE



WAREHOUSE LAYOUT

Racking

Docks and Doors

Calculated Data

Object Properties	
Id	StorageMedium_1
Type	Storage Medium
Anchor	<input checked="" type="checkbox"/>
Left	9.84
Right	77.15
Top	46.65
Bottom	18.35
Length	55.01
Width	33.01
Area	1815.61
W/H Volume %	15.46
Beams	2992
Uprights	396
Base Pallets	374
Total Pallets	3366
Pick Faces	374

Physical Coordinates

Columns and column logic

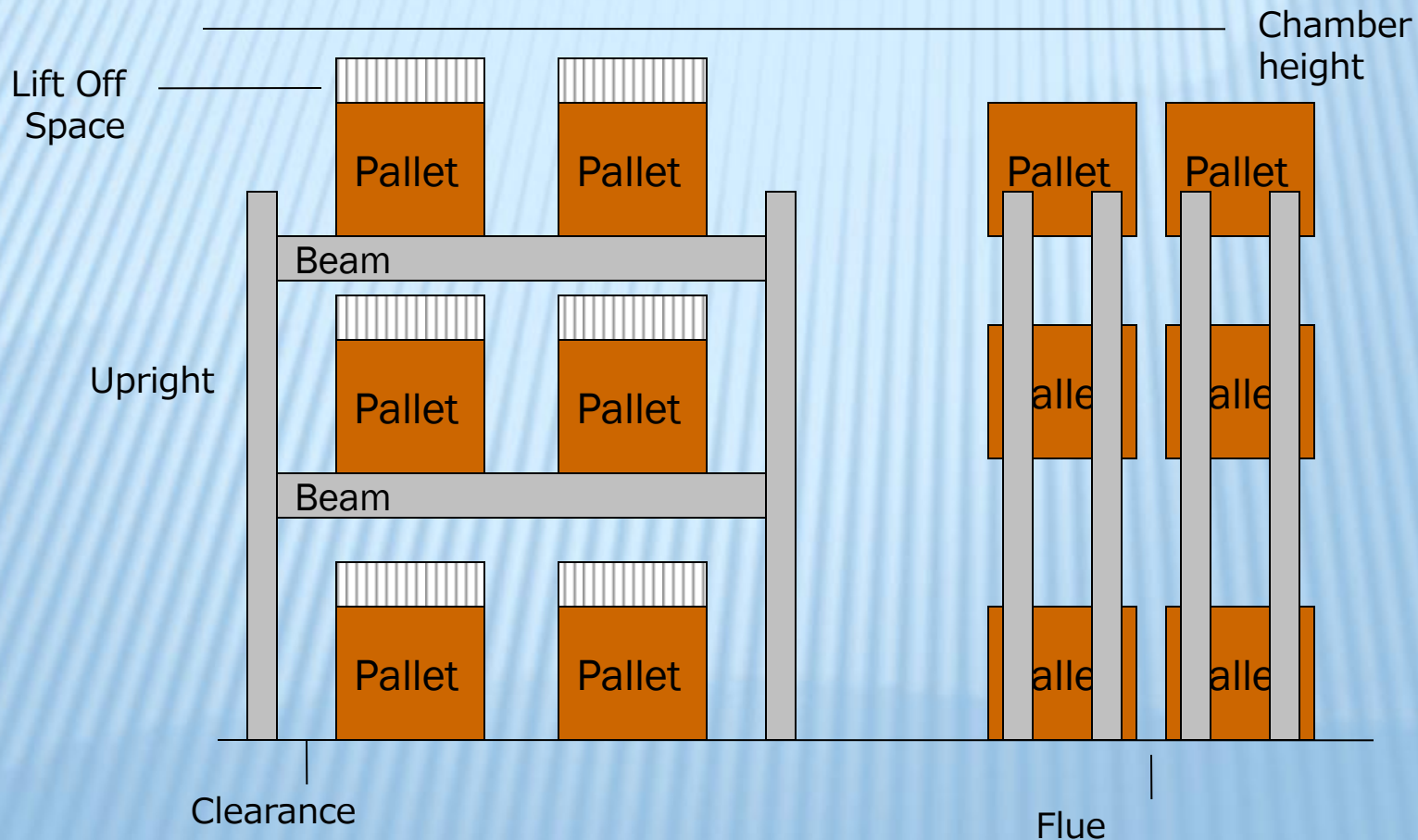
Office/marshalling area

Jnits: Metric, ViewPort Location X: 120.94, Y: 0, Z: 53.52

Ready

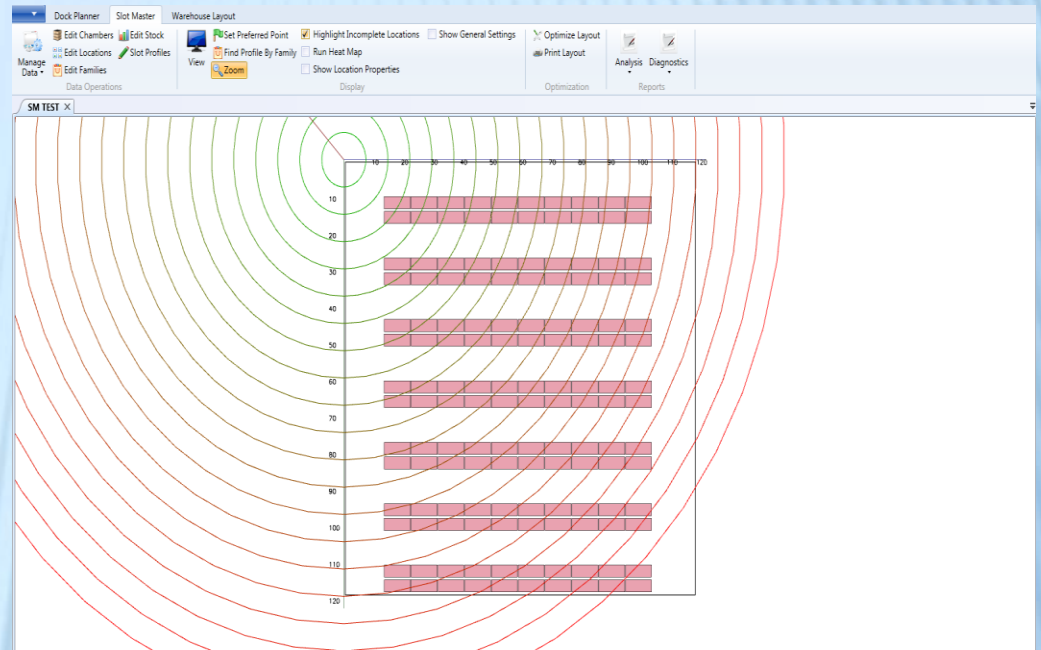
WAREHOUSE LAYOUT

- ✖ Input Pallet dimensions.
- ✖ Input Pallet clearance, lift off space, flue space (of use default).
 - + Software automatically builds the racking to those specifications.

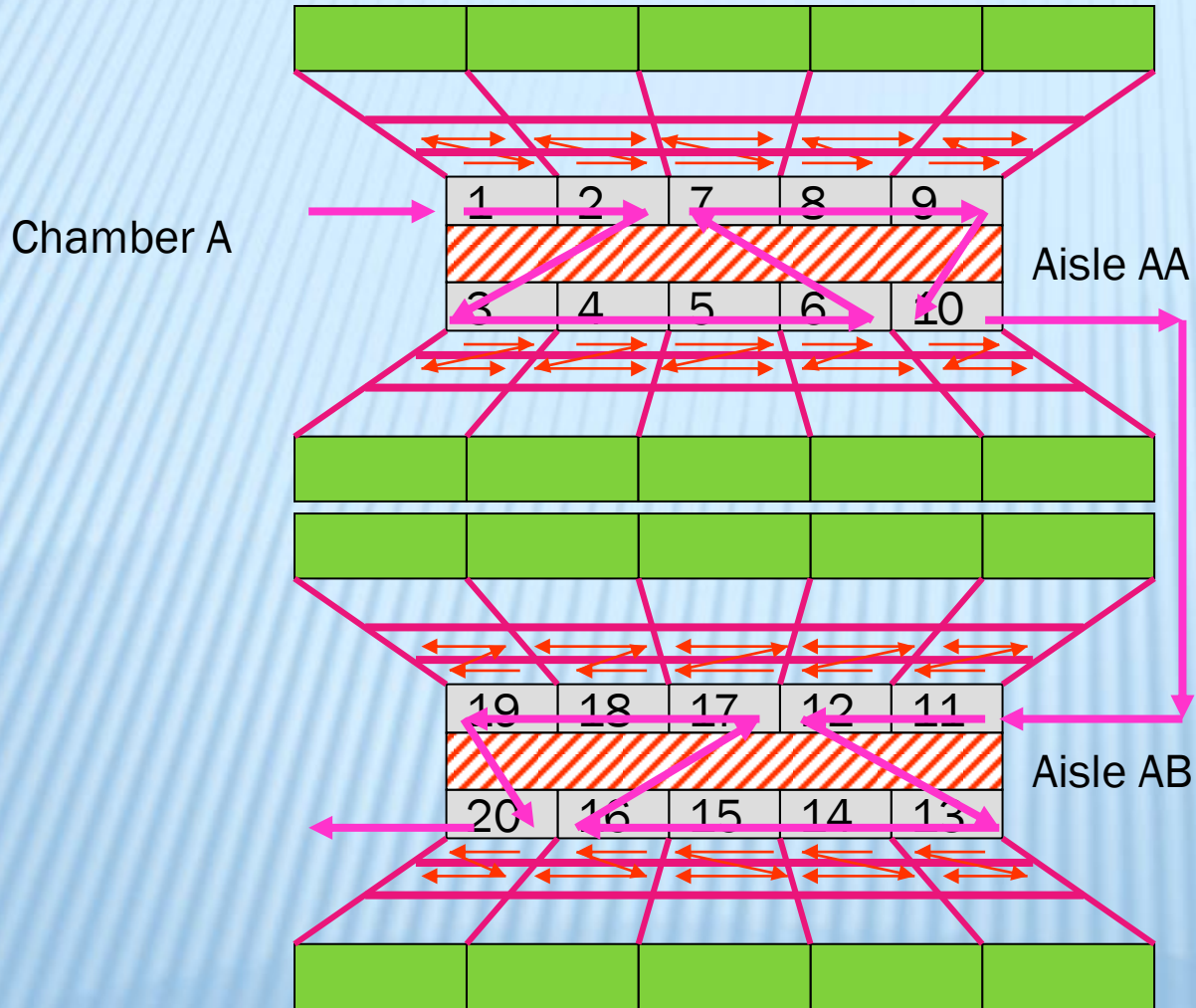


SLOT MASTER

- Slotting warehouse in family groups.
- Run different pick sequences in different sections of the warehouse.
- Able to handle product toxicity ratings.
- Hundreds of different slotting scenarios to chose from.
- Compare different sort criteria against each other to find optimum slot order.



SLOT MASTER



SLOT MASTER

- The user can define pick paths through the warehouse moving from bay to bay
 - Sawtooth
 - Z Pick Path
 - U Pick Path
 - Serpentine

- From this, the user can define the vertical component of a multi level pick path

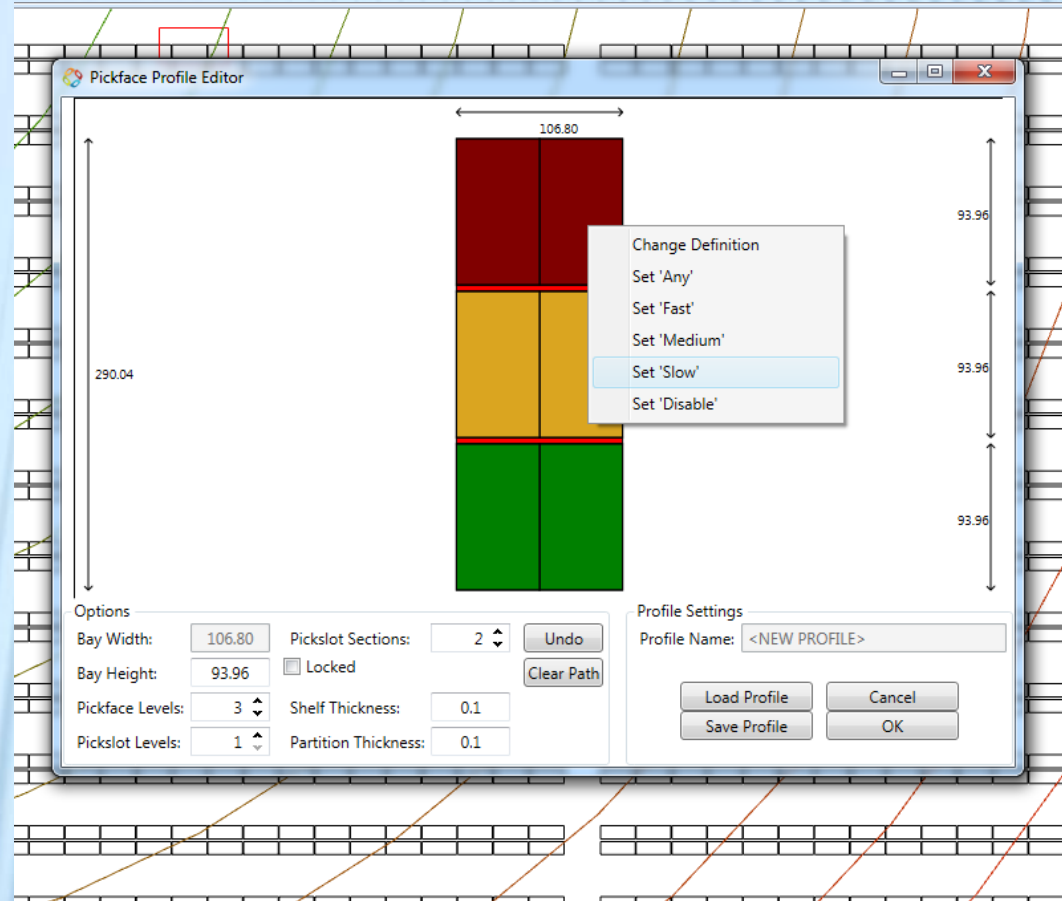
The screenshot displays the 'Assign Pick Sequence' software interface. The main window shows a grid representing a warehouse layout with red lines indicating pick paths. Below the grid, there are controls for the pick sequence, including a 'Path' section with radio buttons for 'Sawtooth', 'Z', 'U', and 'Serpentine', and a 'Manual' option. There are also buttons for 'Export to PDF', 'Save', 'Cancel', 'Zoom', 'Pan Horizontal', and 'Pan Vertical'. The text 'Pick Sequence Generated: 1 to 140' is visible.

A smaller window on the right shows a detailed view of a multi-level pick path. It features a grid with numbers in each cell, representing different levels of the warehouse. Red lines connect the cells, showing the path. The controls at the bottom of this window are identical to the main window.

64	63	60	59	56
66	65	62	61	58
75	76	79	80	83
77	78	81	82	85
104	103	100	99	96

SLOT MASTER

- Can Support multi-level Picking
- Multi-levels & multi sections / bay
- The user can define the pick slot path the size of the shelves.
- Velocity levels can also be defined
 - Green: Fast
 - Gold: Medium
 - Red: Slow
- These profiles can be saved and applied to an individual bay or aisle.



SLOT MASTER

- Slot Master allows the user to import existing locations from ERP or WMS system and use as a baseline to optimize the operation.

The screenshot displays the Microsoft Access application window titled "Slot Master Baseline Template : Database (Access 95 file format)". The interface includes a menu bar (File, Edit, View, Insert, Format, Records, Tools, Window, Help) and a toolbar. The main workspace shows two data tables in Datasheet View:

LocationMap : Table

Location	Bay	Layer	Slot	Description	LocID
AA001A		1	1	1 Carton Flow	Chamber(A)-Run(2)-Bay(1)-Slot(4)-Layer(5)
AA001A		1	1	2 Carton Flow	
AA001A		2	1	1 Carton Flow Slow	
AA001A		2	1	2 carton Flow Slow	

Record: 1 of 550

StockLocation : Table

SKU	Supplier	StockDescriptio	Family	FamilyDescripti	LocID
0000279	0042214	BN RC CHZ BR 47	Brake Pads		Chamber(A)-Run(2)-Bay(1)-Slot(4)-Layer(5)
0000294	0007851	MCRO MGC HS 14	Master Cylinder		
0000316	0000860	WW DLX PZZAI 411	Exhaust Kits		
0000339	0000609	B E NEW ENG 14	Master Cylinder		
0000359	0000711	MS SMTH COC 56	Racing Slicks		
0000371	0000523	M C PIZZA W/T 4	Rear Differential		

Record: 1 of 203

Datasheet View

SLOT MASTER

✘ Slotting Fundamentals

- + Slot by SKU Characteristics, order profiles or family group
- + Slotting supports
 - ✘ zone picking
 - ✘ velocity
 - ✘ Weight
 - ✘ Cube
 - ✘ Slot Capacity
 - ✘ Seasonal
 - ✘ Custom Algorithms
 - ✘ Location and Center of gravity models
 - ✘ Multiple pick Sequencing

SLOT MASTER

- Slot Master optimization wizard allows the user to lock or select either SKU or location to eliminate or include in a particular run. This feature is ideal for slotting new or seasonal product into the warehouse.

Settings

Run Description: SM280714110955

Display Dimensions

Door X (Left to Right): 0 % Top: 0

Door Y (Top to Bottom): 0 % Middle: 0

Free Space: 0 % Bottom: 0

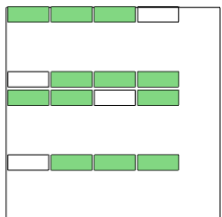
Sort Tolerance: 0

Break Chamber on Family Disable Summary Screens
 Break Aisle on Family Use BOH Slotting Constraints
 Break Loc on Family Allow Multiple Pickfaces
 Break Bay on Family Force SKU Order 1 Layers
 Break Layer on Family Slot Pickfaces On Same Layer

Deactivate an entire Family by clicking on the expander then the SKU Active on each slot you want to unslot.

Select Locations

Zoom



Location	Aisle	Chamber	Description	Capacity	Bulk
<input checked="" type="checkbox"/> AA001A	1	1		1	0
<input checked="" type="checkbox"/> AA002A	1	1		1	0
<input checked="" type="checkbox"/> AA003A	1	1		1	0
<input type="checkbox"/> AA004A	1	1		1	0
<input type="checkbox"/> AB001A	2	1		1	0
<input checked="" type="checkbox"/> AB002A	2	1		1	0
<input checked="" type="checkbox"/> AB003A	2	1		1	0
<input checked="" type="checkbox"/> AB004A	2	1		1	0
<input checked="" type="checkbox"/> AC001A	2	1		1	0
<input checked="" type="checkbox"/> AC002A	2	1		1	0
<input checked="" type="checkbox"/> AC003A	2	1		1	0
<input checked="" type="checkbox"/> AC004A	2	1		1	0

Sort Order

Tier 1 - Product Family

Current Selection <END SORT>

Toxicity Rating : asc
Velocity : desc
Number of SKUs : asc
Ranking : desc
Ranking Expression : desc

Up Toggle Asc/Desc
Down

Tier 2 - Stock Item

Current Selection <END SORT>

Toxicity Rating : asc
Crushable Rating : desc
Tie Count : asc
Velocity : asc
Weight : desc
SKU Code : desc

Up Toggle Asc/Desc
Down

Tier 3 - Location

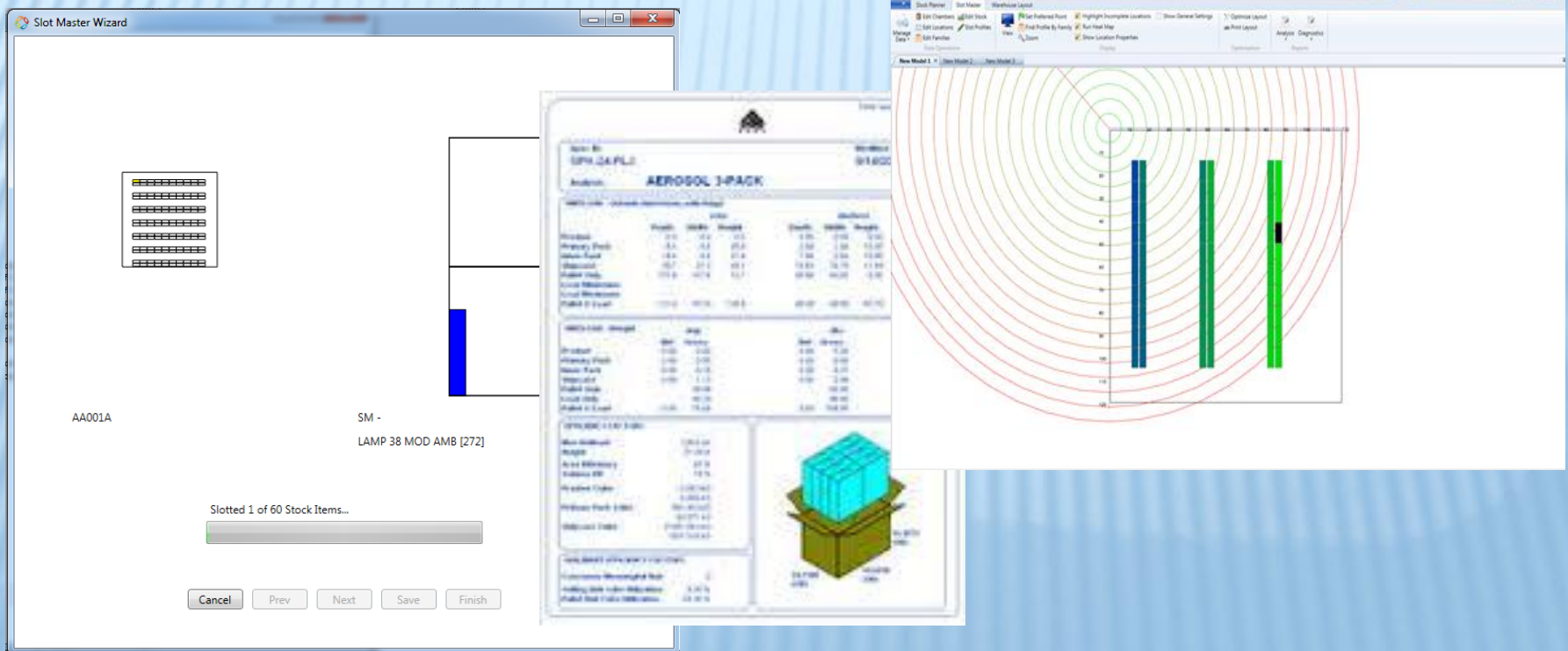
Current Selection <END SORT>

Chamber Proximity : asc
Aisle Proximity : asc
Pick Path Sequence : asc
Pick Path Proximity : asc
Location Proximity : asc
Cube Fill : asc

Up Toggle Asc/Desc
Down

SLOT MASTER

- ✖ Cube Utilization
 - + After slotting the product Slot Master will produce location and utilization statistics
 - + Maximize the storage density in your operation with measurable statistics.

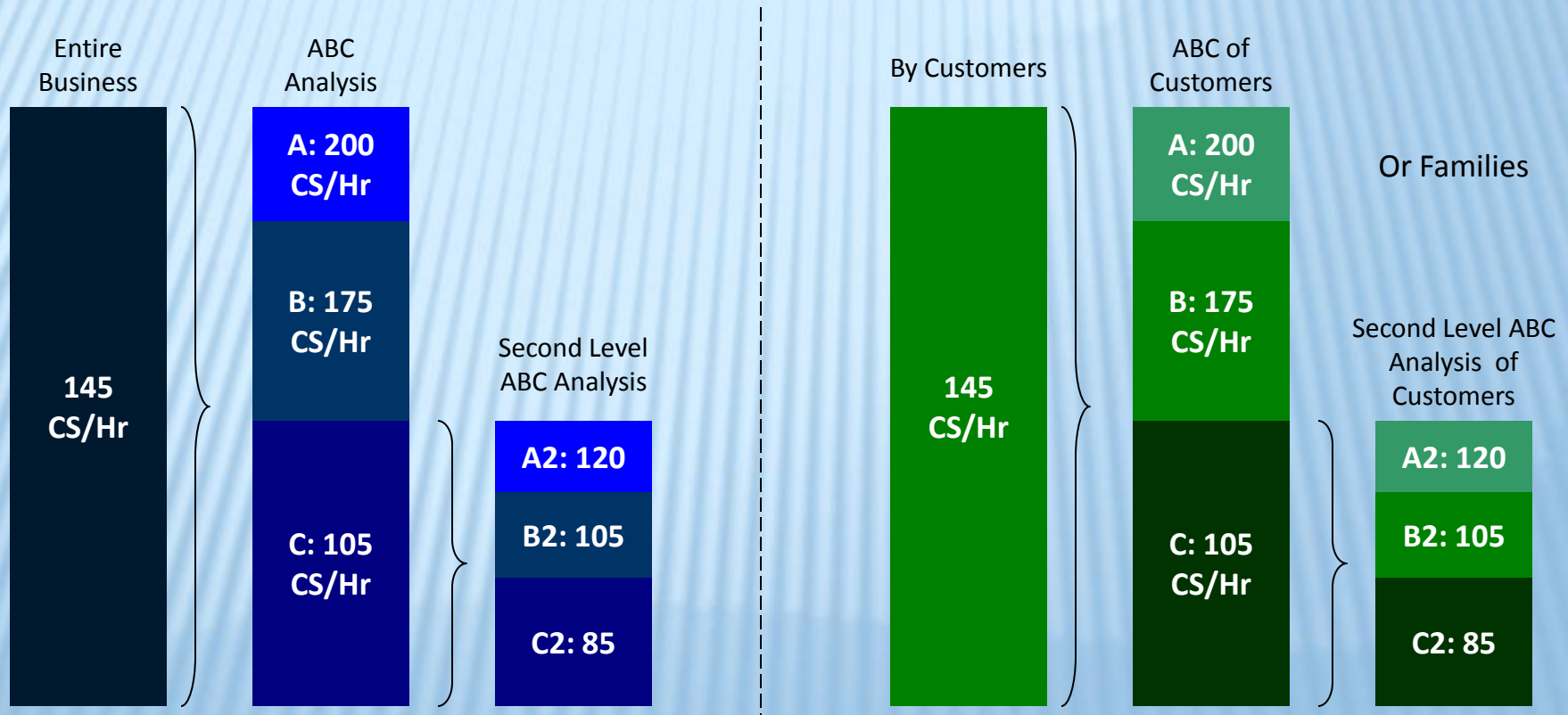


BENCHMARK

- ✘ Benchmark uses 5 industrial engineered data bases to calculate average KPI's within an operation
- ✘ Benchmark captures 72 pieces of information (17 Critical) to calculate work levels and performance measure
- ✘ Benchmark provides a unique comparison to industry averages and target performance
- ✘ Benchmark provides the basis for activity based costing in the operation, a key necessity for profession logistics operations

BENCHMARK LAYERING

- ✘ We use layering to evaluate different parts of the business
- ✘ We can make decisions on how to change the operation of certain product groupings and make them more efficient



ABOUT US



Management Consulting

DC Expert 4.0

Warehouse Management

Transportation Planning

Logistics HealthCheck™